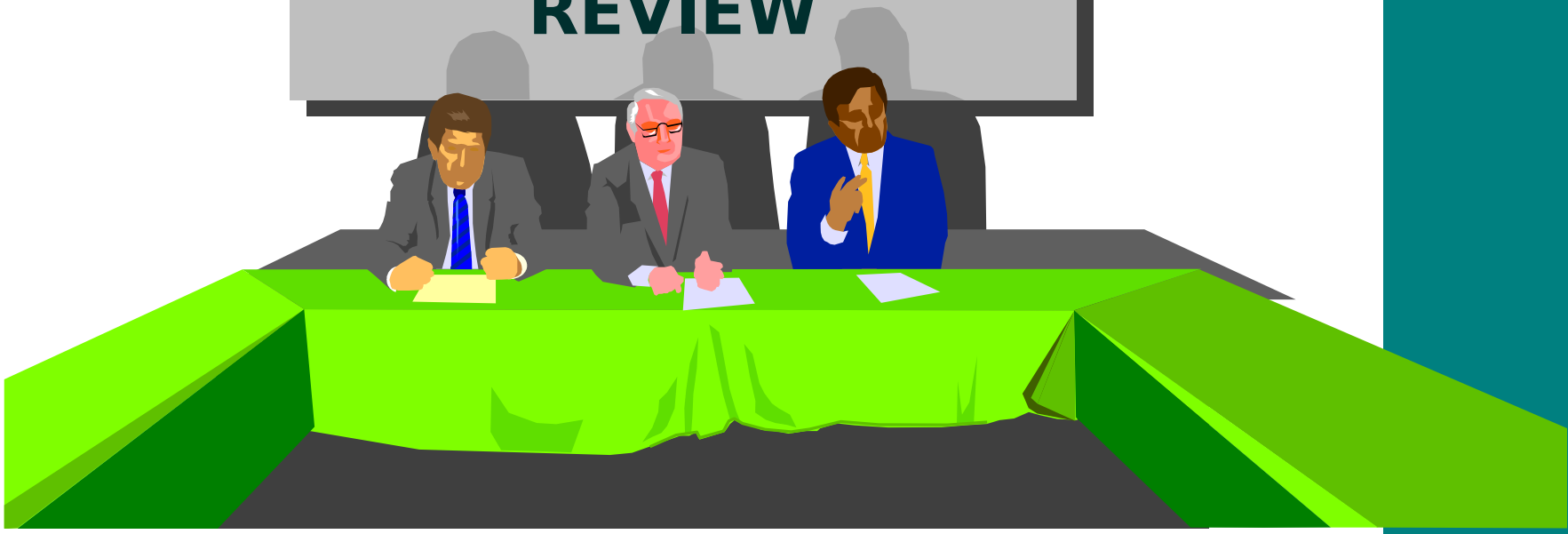
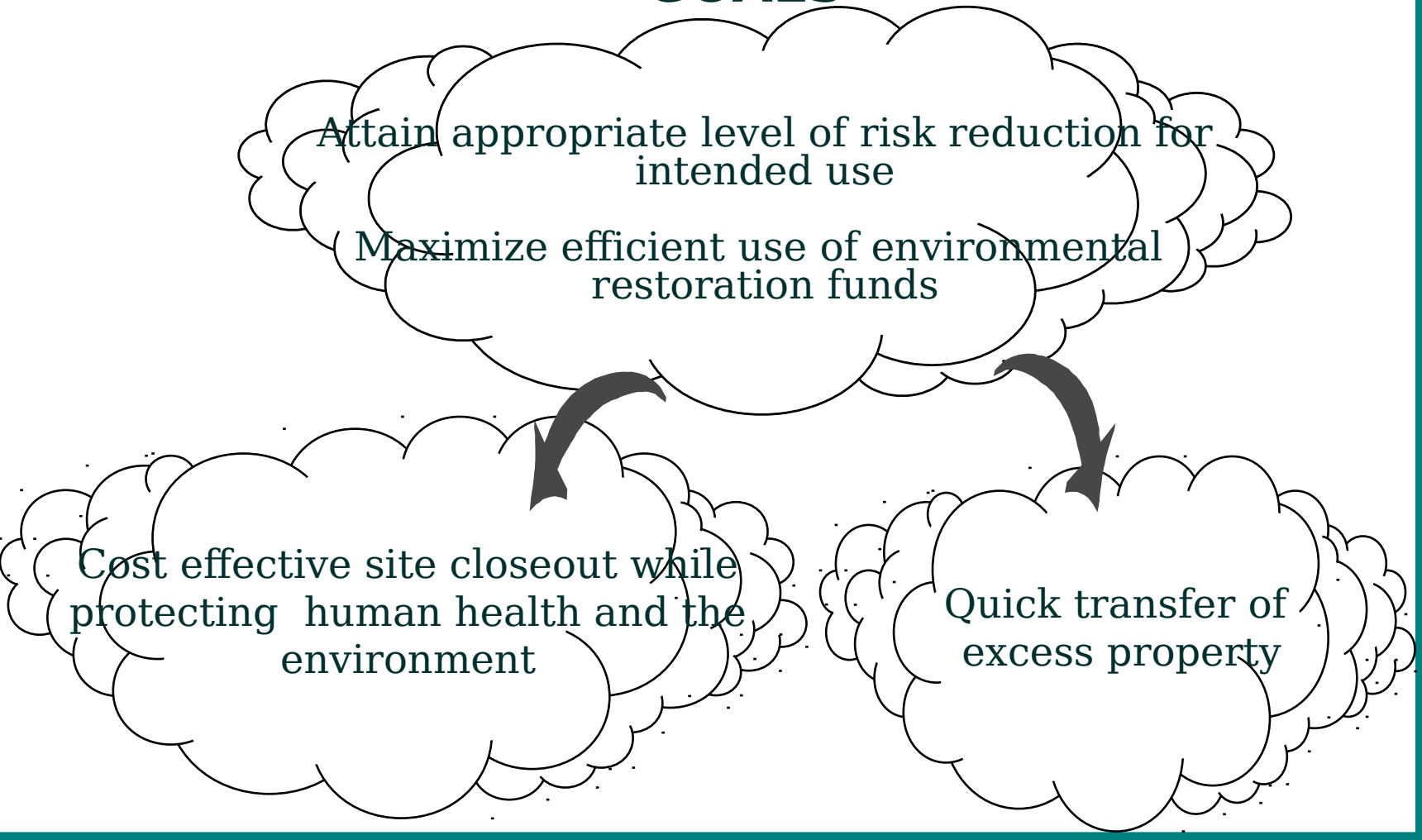
INDEPENDENT TECHNICAL REVIEW



INDEPENDENT TECHNICAL REVIEW

GOALS


Attain appropriate level of risk reduction for intended use
Maximize efficient use of environmental restoration funds
Cost effective site closeout while protecting human health and the environment
Quick transfer of excess property

INDEPENDENT TECHNICAL REVIEW

LESSONS LEARNED

GENERAL PROGRAM FINDINGS

- LACK OF DECISION-BASED PROJECT PLANNING
- INSUFFICIENT USE OF DATA QUALITY OBJECTIVE PROCESS
- MISSING OR POOR CONCEPTUAL SITE MODELS
- MISUSE OF RISK MANAGEMENT APPROACH & RISK REDUCTION
- LACK OF UNCERTAINTY MANAGEMENT AND COMMUNICATION
- INSUFFICIENT LEGAL REVIEW OF ARARS
- INSUFFICIENT ANALYSIS OF ALTERNATIVES
- LACK OF EXIT STRATEGY DEVELOPMENT

INDEPENDENT TECHNICAL REVIEW

LESSONS LEARNED (cont'd)

ECOLOGICAL RISK ASSESSMENT APPROACH

- "PROTECTING ENVIRONMENT" AND "VALUED ECOLOGICAL RESOURCE" UNDEFINED; LEADING TO CONSERVATISM
- APPROACH ANALOGOUS TO HUMAN HEALTH RISK ASSESSMENT (PROTECTING INDIVIDUAL; NOT ECOSYSTEM)
- NEED TOP DOWN LOOK RATHER THAN BOTTOM UP

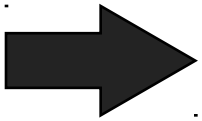
INDEPENDENT TECHNICAL REVIEW

- Pilot in FY97 and implemented in FY98 (BRAC)/ Pilot in FY98 and implemented in FY99 (ER,A)
- Conducting on FY+1/FY+2 projects >$500K (BRAC) and >$6M (ER,A) throughout restoration process
- All projects reviewed at installation (level I) or at a central location (level II)
- Entire cleanup team encouraged to attend
- Not a decision-making body

INDEPENDENT TECHNICAL REVIEW
TEAM COMPOSITION

TEAM MEMBERS

- Coordinator
- Facilitator
- Potential Team Member Disciplines
  - Engineer
  - Geologist/Hydrogeologist
  - Decision Analyst
  - Technology Expert
  - Human Health Risk Assessor
  - Ecological Risk Assessor
  - Environmental Laws/ARARs
  - Groundwater Modeling
  - Unexploded Ordnance
  - Innovative/Specific Technology
  - Chemist



SOURCES

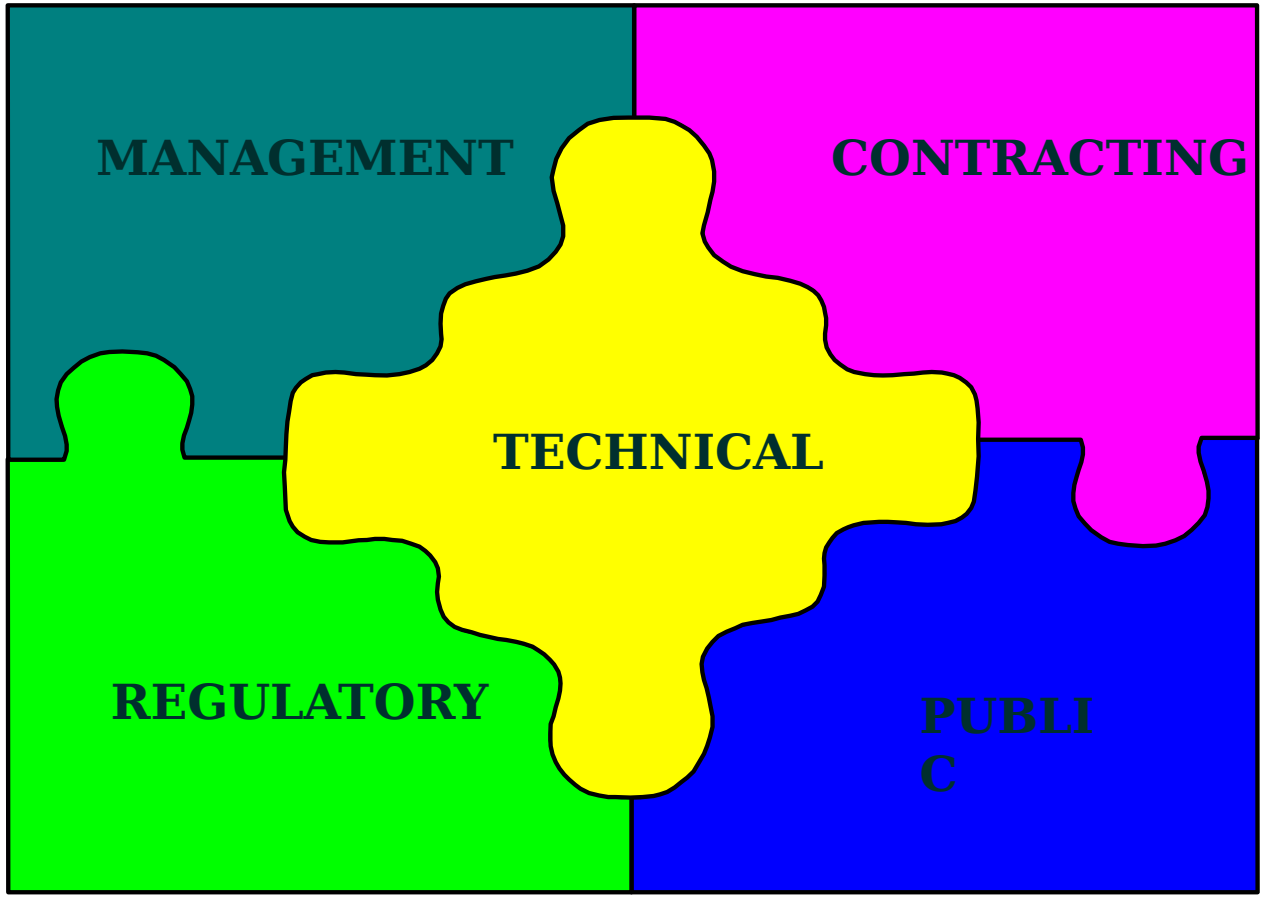
- Army
- Navy
- Air Force
- USGS
- EPA
- Academia
- Consultants
- Western Governors' Association

WHAT IS INDEPENDENT TECHNICAL REVIEW?

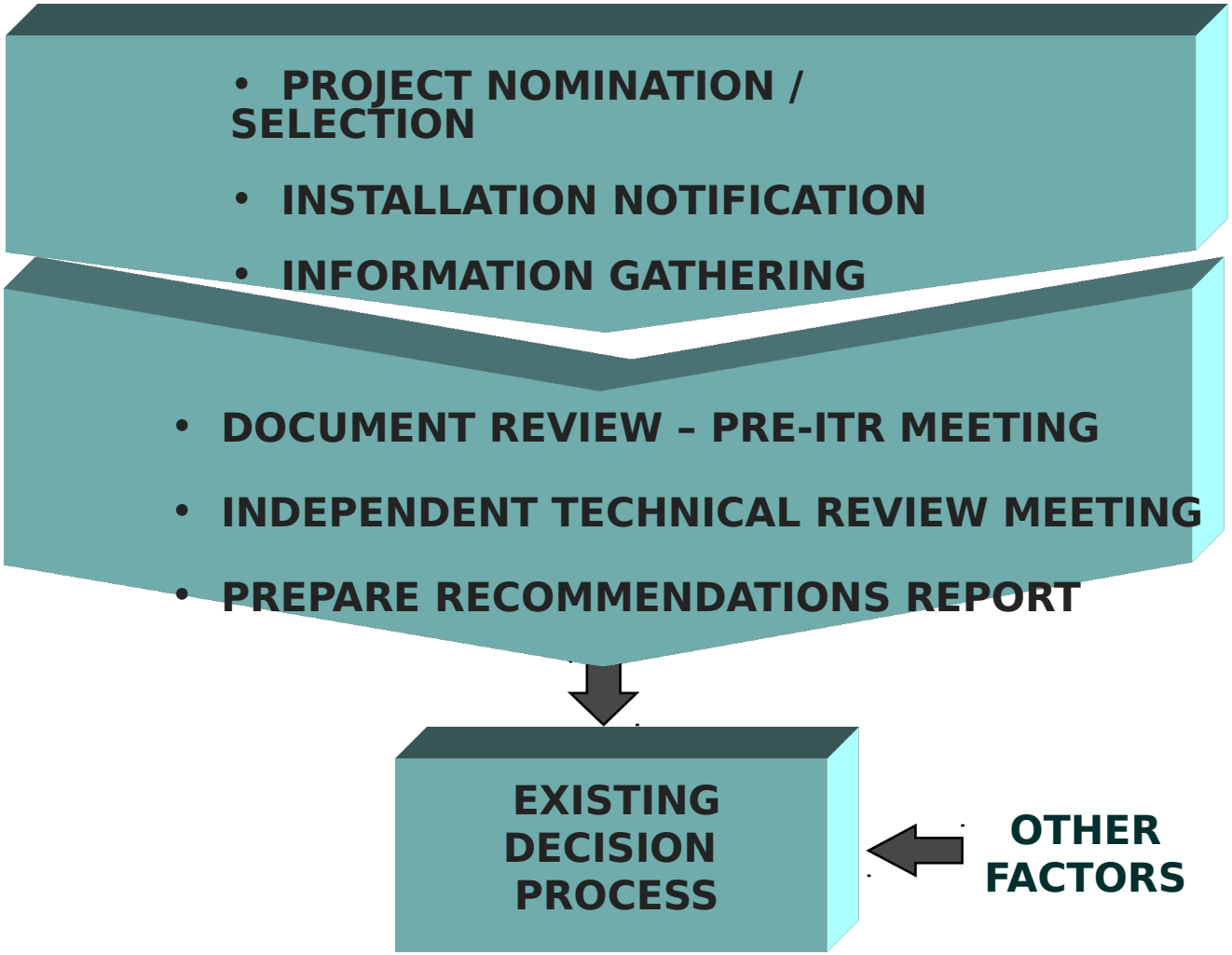
- **Objective 3rd party technical review**
- **“Out of box” thought process to**:
  - Determine if approach/rationale is risk-based
  - Determine if selected remedy is a cost-effective solution
  - Establish consistency of restoration decisions
  - Promote risk management approach to provide cost-benefit balance
  - Provide lessons learned and information to the field and HQ
- **Technical Assistance**

INDEPENDENT TECHNICAL REVIEW

MAJOR PROJECT AREAS



INDEPENDENT TECHNICAL REVIEW PROCESS



INDEPENDENT TECHNICAL REVIEW

LESSONS LEARNED INITIATIVES

TRAINING

- PRINCIPLES OF ENVIRONMENTAL RESTORATION
- WORKING WITH MACOMS TO GET TO FIELD
- POST MATERIALS ON THE WEB

ECOLOGICAL RISK ASSESSMENT APPROACH

- WORKING WITH USACHPPM ON GUIDANCE

LESSONS LEARNED REPORT (AND UPDATES)

- TO REACH INSTALLATIONS NOT REVIEWED BY ITR
- POST ON THE WEB